

Oracle Database 19c/21c/23ai SQL Tuning

Course information

Days : 3

Total lessons : 12

Suggested Prerequisites :

- Oracle Database 12c: SQL Fundamentals

Training includes :

- Experienced trainer(s)
- Pre-test and Post-test
- Practices and solutions

Public price :

- 20,000 baht(THB) : 1 person

In-house price :

- 60,000 baht(THB) : Economic Class : 1 - 5 people
- 72,000 baht(THB) : Small Class : 6 - 10 people
- 86,000 baht(THB) : Middle Class : 11 - 20 people
- 105,000 baht(THB) : Large Class : 21 - 30 people

All prices exclude VAT 7 %

Course details

Day 1

Lesson 1 : Introduction to SQL Tuning

Lesson 2 : Using Application Tracing Tools

Lesson 3 : Understanding Basic Tuning Techniques

Lesson 4 : Optimizer Fundamentals

Day 2

Lesson 5 : Generating and Displaying Execution Plans

Lesson 6 : Interpreting Execution Plans and Enhancements

Lesson 7 : Optimizer: Table and Index Access Paths

Lesson 8 : Optimizer Join Operations

Day 3

Lesson 9 : Other Optimizer Operators

Lesson 10 : Introduction to Optimizer Statistics Concepts

Lesson 11 : Using Bind Variables

Lesson 12 : SQL Plan Management



Lesson details

Lesson 1 : Introduction to SQL Tuning

- SQL Tuning Session
- SQL Tuning Strategies
- Development Environments: Overview
- SQLTXPLAIN (SQLT) Diagnostic Tool

Lesson 2 : Using Application Tracing Tools

- Using the SQL Trace Facility: Overview
- Steps Needed Before Tracing
- Available Tracing Tools: Overview
- The trcsess Utility
- Formatting SQL Trace Files: Overview

Lesson 3 : Understanding Basic Tuning Techniques

- Developing Efficient SQL statement
- Scripts Used in This Lesson
- Table Design
- Index Usage
- Transformed Index
- Data Type Mismatch
- NULL usage
- Tune the ORDER BY Clause

Lesson 4 : Optimizer Fundamentals

- SQL Statement Representation
- SQL Statement Processing
- Why Do You Need an Optimizer?
- Components of the Optimizer
- Query Transformer
- Cost-Based Optimizer
- Adaptive Query Optimization
- Optimizer Features and Oracle Database Releases

Lesson 5 : Generating and Displaying Execution Plans

- Execution Plan?
- The EXPLAIN PLAN Command
- Plan Table
- AUTOTRACE
- V\$SQL_PLAN View
- Automatic Workload Repository
- SQL Monitoring

Lesson 6 : Interpreting Execution Plans and Enhancements

- Interpreting a Serial Execution Plan
- Adaptive Optimizations

Lesson 7 : Optimizer: Table and Index Access Paths

- Row Source Operations
- Main Structures and Access Paths
- Full Table Scan
- Indexes
- Common Observations

Lesson 8 : Optimizer Join Operations

- Join Methods
- Join Types

Lesson 9 : Other Optimizer Operators

- SQL operators
- Other N-Array Operations
- Result Cache operators



Lesson 10 : Introduction to Optimizer Statistics Concepts

- Optimizer Statistics
- Types of Optimizer Statistics
- Gather and Manage Optimizer Statistics: Overview

Lesson 11 : Using Bind Variables

- Cursor Sharing and Different Literal Values
- Cursor Sharing and Bind Variables

Lesson 12 : SQL Plan Management

- Maintaining SQL Performance
- SQL Plan Management

For more information please contact :

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